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NEWS	7	DEC 21	IPC search and display fields enhanced in CA/CAplus with the IPC reform
NEWS	8	DEC 23	New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/ USPAT2
NEWS	9	JAN 13	IPC 8 searching in IFIPAT, IFIUDB, and IFICDB
NEWS	10	JAN 13	New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to INPADOC
NEWS	11	JAN 17	Pre-1988 INPI data added to MARPAT
NEWS	12	JAN 17	IPC 8 in the WPI family of databases including WPIFV
NEWS	13	JAN 30	Saved answer limit increased
NEWS	14	JAN 31	Monthly current-awareness alert (SDI) frequency added to TULSA
NEWS	15	FEB 21	STN AnaVist, Version 1.1, lets you share your STN AnaVist visualization results
NEWS	16	FEB 22	Status of current WO (PCT) information on STN
NEWS	17	FEB 22	The IPC thesaurus added to additional patent databases on STN
NEWS	18	FEB 22	Updates in EPFULL; IPC 8 enhancements added

NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
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FILE 'HOME' ENTERED AT 12:34:47 ON 24 FEB 2006

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=> file reg
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

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STRUCTURE FILE UPDATES:   22 FEB 2006  HIGHEST RN 874945-83-2
DICTIONARY FILE UPDATES:  22 FEB 2006  HIGHEST RN 874945-83-2

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* available and contains the CA role and document type information. *
*                                                                    *
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experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> s allopurinol
L1          24 ALLOPURINOL

=> s allopurinol/cn
L2           1 ALLOPURINOL/CN

=> d str rn cn

L2   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2006 ACS on STN
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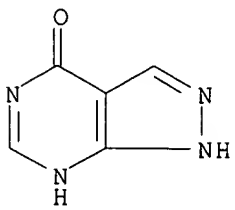

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

RN 315-30-0 REGISTRY
CN 4H-Pyrazolo[3,4-d]pyrimidin-4-one, 1,5-dihydro- (7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1,5-Dihydro-1H-pyrazolo[3,4-d]pyrimidin-4-one
CN 1H-Pyrazolo[3,4-d]pyrimidin-4-ol
CN 4-Hydroxy-1H-pyrazolo[3,4-d]pyrimidine
CN 4-Hydroxypyrazolo[3,4-d]pyrimidine
CN 4-Oxopyrazolo[3,4-d]pyrimidine
CN Adenock
CN Allopur
CN **Allopurinol**
CN Allopurinol(I)
CN Allozym
CN Allurtal
CN Aloral
CN Alositol
CN Anoprolin
CN Anzief
CN Apulonga
CN Apurin
CN Apurol
CN Atisuril
CN Bleminol
CN Bloxanth
CN BW 15658
CN BW 56-158
CN Caplenal
CN Cellidrin
CN Cosuric
CN Dabroson
CN Embarin
CN Epidropal
CN Foligan
CN Geapur
CN Gichtex
CN Gotax
CN Hamarin
CN Hexanurat
CN HPP
CN Ketanrift
CN Ketobun A
CN Ledopur
CN Lopurin
CN Lysuron
CN Milurit
CN Miniplanor
CN Monarch
CN Nektrohan
CN NSC 101655
CN NSC 1390
CN Remid
CN Riball
CN Sigapurol
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	12.30	12.51

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FILE COVERS 1907 - 24 Feb 2006  VOL 144 ISS 10
FILE LAST UPDATED: 23 Feb 2006  (20060223/ED)

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=> s 315-30-0/rn
          2339 315-30-0
            41 315-30-0D
L3          2312 315-30-0/RN
                 (315-30-0 (NOTL) 315-30-0D )

=> e hypertension
E1             2     HYPERTENSIO/BI
E2             3     HYPERTENSIOGENIC/BI
E3         76753 --> HYPERTENSION/BI
E4             1     HYPERTENSION1/BI
E5             1     HYPERTENSION3/BI
E6             2     HYPERTENSION5/BI
E7             3     HYPERTENSIONAL/BI
E8             1     HYPERTENSIONC/BI
E9             1     HYPERTENSIOND/BI
E10            1     HYPERTENSIONGENIC/BI
E11            1     HYPERTENSIONN/BI
E12            1     HYPERTENSIONOGENIC/BI

=> s e3
          76753 HYPERTENSION/BI
             97 HYPERTENSIONS/BI
L4        76773 HYPERTENSION/BI
                ((HYPERTENSION OR HYPERTENSIONS)/BI)

=> s L3 and L4
L5            43 L3 AND L4

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       3387339 AY<2001
      20847148 PY<2001
       3325017 PRY<2001
L6            23 L5 AND (AY<2001 OR PY<2001 OR PRY<2001)

=> dup rem L6
PROCESSING COMPLETED FOR L6
L7            23 DUP REM L6 (0 DUPLICATES REMOVED)
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       3148993 AY<2000
      19940782 PY<2000
       3080746 PRY<2000
L8           20 L5 AND (AY<2000 OR PY<2000 OR PRY<2000)

=> d 1-23 L7 ibib abs

L7   ANSWER 1 OF 23  CAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:        2002:10270  CAPLUS
DOCUMENT NUMBER:         136:64126
TITLE:                   Agent reducing uric acid levels for treatment of
                         cardiovascular disease and hypertension
INVENTOR(S):             Kivlighn, Salah; Johnson, Richard J.; Mazzali, Marilda
PATENT ASSIGNEE(S):      Merck & Co., Inc., USA; University of Washington
SOURCE:                  PCT Int. Appl., 49 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.          DATE
     ---------------      ----   --------    -------------------      --------
     WO 2002000210         A2    20020103    WO 2001-US20457          20010628 <--
     WO 2002000210         A3    20021024
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM,
             HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2413201            AA    20020103    CA 2001-2413201          20010628 <--
     AU 2001068734         A5    20020108    AU 2001-68734            20010628 <--
     US 2002019360         A1    20020214    US 2001-892505           20010628 <--
     EP 1317258            A2    20030611    EP 2001-946722           20010628 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2004517804         T2    20040617    JP 2002-504992           20010628 <--
PRIORITY APPLN. INFO.:                       US 2000-214825P      P   20000628 <--
                                             WO 2001-US20457      W   20010628

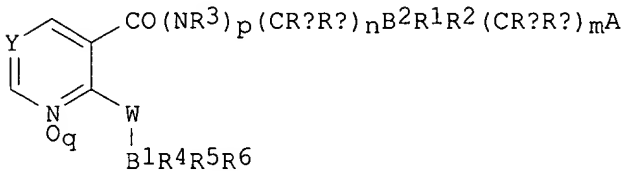
AB   This invention relates to a method for treating and preventing
     hypertension by administering a therapeutically effective amount of
     an agent capable of reducing uric acid levels in a patient in need of such
     treatment.  Addnl., the scope of the invention includes a method of
     treating coronary heart disease by administering a therapeutically
     effective amount of an agent capable of reducing uric acid levels in a
     patient in need of such treatment.  Allopurinol administered from the
     initiation of an oxonic acid diet prevented the development of
     hyperuricemia and hypertension.  In hypertensive, hyperuricemic
     rats, either withdrawal of the oxonic acid or adding allopurinol also
     resulted in a reduction in the blood pressure in association with a fall in
serum
     uric acid values.

L7   ANSWER 2 OF 23  CAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:        2002:591707  CAPLUS
DOCUMENT NUMBER:         137:140509
TITLE:                   Preparation of nicotinamides and mimetics as
                         inhibitors of phosphodiesterase IV isozymes
INVENTOR(S):             Chambers, Robert J.; Magee, Thomas V.; Marfat, Anthony
```

PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: Eur. Pat. Appl., 180 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
EP 1229034	A1	20020807	EP 2002-250202		20020111	
EP 1229034	B1	20050413				
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR						
AT 293109	E	20050415	AT 2002-250202		20020111	
ES 2239203	T3	20050916	ES 2002-2250202		20020111	
CA 2369462	AA	20020731	CA 2002-2369462		20020129	
US 2002111495	A1	20020815	US 2002-62811		20020131	<--
BR 2002000250	A	20021008	BR 2002-250		20020131	
US 2004171798	A1	20040902	US 2004-781062		20040217	
PRIORITY APPLN. INFO.:			US 2001-265240P	P	20010131	
			US 1997-43403P	P	19970404	<--
			US 1998-105120P	P	19981021	<--
			US 2002-62811	B1	20020131	

OTHER SOURCE(S): MARPAT 137:140509
GI



I

AB Title compds. [I; p, q = 0, 1; m = 0-2; n = 1, 2; A = CO2R7, CONR9CO2R7, CONR7R9, OP(O)(OH)2, SO3H, acylsulfonamido, etc.; W = O, S, SO, SO2, NR3; Y = N, NO, CR11; R1, R2 = H, F, Cl, cyano, NO2, alkyl, alkynyl, fluoroalkyl, etc.; R3 = H, alkyl, Ph, PhCH2, etc.; R4-R6 = H, F, Cl, alkynyl, cyano, NO2, etc.; R7 = H, (substituted) alkyl, alkenyl, alkynyl; R9 = H, alkyl, cycloalkyl, Ph, PhCH2, pyridyl, etc.; R11 = H, F, Cl, cyano, NO2, alkyl, alkynyl, fluoroalkyl, fluoroalkoxy, etc.; Ra, Rb = H, F, CF3, alkyl, (substituted) cycloalkyl, Ph, PhCH2; B1, B2 = 3-7 membered (hetero)cyclyl, 7-12 membered poly(hetero)cyclyl; pairs of variables may form rings; with provisos], were prepared (no data). Thus, Me 2-[4-[[[2-(benzo[1,3]dioxol-5-yloxy)pyridine-3-carbonyl]amino]methyl]phenyl]-2-methylpropionate was suspended in Me3COH. Aqueous NaOH was added to the suspension, and the reaction mixture was refluxed 1 h to give 2-[4-[[[2-(benzo[1,3]dioxol-5-yloxy)pyridine-3-carbonyl]amino]methyl]phenyl]-2-methylpropionic acid.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:338762 CAPLUS
DOCUMENT NUMBER: 134:362292
TITLE: Methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile
INVENTOR(S): Farr, Spencer
PATENT ASSIGNEE(S): Phase-1 Molecular Toxicology, USA
SOURCE: PCT Int. Appl., 222 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001032928	A2	20010510	WO 2000-US30474	20001103 <--
WO 2001032928	A3	20020725		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-165398P P 19991105 <--
US 2000-196571P P 20000411 <--

AB The invention discloses methods, gene databases, gene arrays, protein arrays, and devices that may be used to determine the hypersensitivity of individuals to a given agent, such as drug or other chemical, in order to prevent toxic side effects. In one embodiment, methods of identifying hypersensitivity in a subject by obtaining a gene expression profile of multiple genes associated with hypersensitivity of the subject suspected to be hypersensitive, and identifying in the gene expression profile of the subject a pattern of gene expression of the genes associated with hypersensitivity are disclosed. The gene expression profile of the subject may be compared with the gene expression profile of a normal individual and a hypersensitive individual. The gene expression profile of the subject that is obtained may comprise a profile of levels of mRNA or cDNA. The gene expression profile may be obtained by using an array of nucleic acid probes for the plurality of genes associated with hypersensitivity. The expression of the genes predetd. to be associated with hypersensitivity is directly related to prevention or repair of toxic damage at the tissue, organ or system level. Gene databases arrays and apparatus useful for identifying hypersensitivity in a subject are also disclosed.

L7 ANSWER 4 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:861482 CAPLUS
DOCUMENT NUMBER: 134:32977
TITLE: Methods and compositions for the treatment of neuroleptic and related disorders using sertindole derivatives
INVENTOR(S): Jerussi, Thomas P.
PATENT ASSIGNEE(S): Sepracor Inc., USA
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000072837	A2	20001207	WO 2000-US14984	20000531 <--
WO 2000072837	A3	20010517		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW,

AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6489341 B1 20021203 US 2000-580492 20000530 <--
PRIORITY APPLN. INFO.: US 1999-137447P P 19990602 <--
US 2000-580492 A 20000530 <--

AB The invention relates to novel methods using, and pharmaceutical compns. and dosage forms comprising, sertindole derivs. Sertindole derivs. include, but are not limited to, nor-sertindole, 5-oxo-sertindole, dehydro-sertindole, and dehydro-nor-sertindole. The methods of the invention are directed to the treatment and prevention of neuroleptic and related disorders such as, but are not limited to, psychotic disorders, depression, anxiety, substance addiction, memory impairment and pain. For example, capsules were prepared containing a sertindole derivative 50.0 mg, lactose 48.5 mg, TiO2 0.5 mg, and Mg stearate 1.0 mg.

L7 ANSWER 5 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:259979 CAPLUS
DOCUMENT NUMBER: 132:288794
TITLE: Sympathetic nervous system activity-reducing agents for treatment of disease- or age-related weight loss and for enhancement of exercise performance
INVENTOR(S): Anker, Stefan Dietmar; Coats, Andrew Justin Stewart
PATENT ASSIGNEE(S): Imperial College Innovations Limited, UK
SOURCE: PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000021509	A2	20000420	WO 1999-GB3302	19991015 <--
WO 2000021509	A3	20001109		
W: JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1121111	A2	20010808	EP 1999-947762	19991015 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002527378	T2	20020827	JP 2000-575485	19991015 <--

PRIORITY APPLN. INFO.:
GB 1998-22458 A 19981015 <--
GB 1998-22459 A 19981015 <--
GB 1999-17181 A 19990723 <--
WO 1999-GB3302 W 19991015 <--

AB A method of treating weight loss due to underlying disease in a patient, the method comprising administering to the patient an effective amount of an agent which reduces sympathetic nervous system activity. A method of treating weight loss due to underlying disease in a patient, the method comprising administering to the patient an effective amount of any one or more of the following: a compound which inhibits the effect of aldosterone such as an aldosterone antagonist; a chymase inhibitor; a cathepsin B inhibitor; a β receptor blocker; an imidazoline receptor antagonist; a centrally acting α receptor antagonist; a peripherally acting α receptor antagonist; a ganglion blocking agent; a drug that has an effect on cardiovascular reflexes and thereby reduces SNS activity such as an opiate; scopolamine; an endothelin receptor antagonist; and a xanthine oxidase inhibitor. The methods are particularly useful in treating cardiac cachexia. The sympathetic nervous system activity-reducing agents may also be used to treat weight loss due to aging and to enhance exercise performance.

L7 ANSWER 6 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:229952 CAPLUS
DOCUMENT NUMBER: 132:260495
TITLE: Allopurinol normalizes endothelial dysfunction in type 2 diabetics with mild **hypertension**
AUTHOR(S): Butler, Robert; Morris, Andrew D.; Belch, Jill J. F.; Hill, Alexander; Struthers, Allan D.
CORPORATE SOURCE: University Department of Clinical Pharmacology and Therapeutics, Ninewells Hospital and Medical School, Dundee, DD1 9SY, UK
SOURCE: Hypertension (**2000**), 35(3), 746-751
CODEN: HPRTDN; ISSN: 0194-911X
PUBLISHER: Lippincott Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Therapeutic strategies against free radicals have mostly focused on the augmentation of antioxidant defenses (eg, vitamins C and E). A novel approach is to prevent free radical generation by the enzyme system xanthine oxidase. We examined whether the inhibition of xanthine oxidase with allopurinol can improve endothelial function in subjects with type 2 diabetes and coexisting mild **hypertension** compared with control subjects of a similar age. We examined 23 subjects (11 patients with type 2 diabetes and 12 healthy age-matched control subjects) in 2 parallel groups. The subjects were administered 300 mg allopurinol in a randomized, placebo-controlled study in which both therapies were administered for 1 mo. Endothelial function was assessed with bilateral venous occlusion plethysmog., in which the forearm blood flow responses to intra-arterial infusions of endothelium-dependent and -independent vasodilators were measured. Allopurinol significantly increased the mean forearm blood flow response to acetylcholine by 30% (3.16±1.21 vs. 2.54±0.76 mL · 100 mL-1 · min-1 allopurinol vs. placebo; P=0.012, 95% CI 0.14, 1.30) but did not affect the nitroprusside response in patients with type 2 diabetes. There was no significant impact on either endothelium-dependent or -independent vascular responses in age-matched control subjects. Allopurinol improved endothelial function to near-normal levels. Regarding markers of free radical activity, the level of malondialdehyde was significantly reduced (0.30±0.04 vs. 0.34±0.05 μmol/L for allopurinol vs. placebo, P=0.03) in patients with type 2 diabetes but not in control subjects. The xanthine oxidase inhibitor allopurinol improves endothelial dysfunction in patients with type 2 diabetes with mild **hypertension** but not in matched control subjects. In the former group, allopurinol restored endothelial function to near-normal levels.
REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:327858 CAPLUS
DOCUMENT NUMBER: 135:205240
TITLE: Effect of losartan and furosemide on the urinary excretion of oxypurinol and uric acid
AUTHOR(S): Yamamoto, Tetsuya; Moriwaki, Yuji; Takahashi, Sumio; Tsutsumi, Zenta; Hada, Toshikazu
CORPORATE SOURCE: Third Department of Internal Medicine, Hyogo College of Medicine, Nishinomiya, Japan
SOURCE: Advances in Experimental Medicine and Biology (**2000**), 486(Purine and Pyrimidine Metabolism in Man X), 185-188
CODEN: AEMBAP; ISSN: 0065-2598
PUBLISHER: Kluwer Academic/Plenum Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Losartan potassium (losartan) is an angiotensin II receptor antagonist

used for the treatment of **hypertension**, which opposes the action of angiotensin II at the AT1 receptor. On the other hand, furosemide is a diuretic and is used for the treatment of heart failure, **hypertension** and edema. A study was conducted to determine whether losartan and furosemide affect the urinary excretion of the allopurinol metabolite oxypurinol together with uric acid. The urinary excretion of uric acid increased by 4.1-fold, and that of oxypurinol by 2-fold, from 1 to 2 h after the administration of losartan. In addition, the fractional clearance of uric acid increased by 4.3-fold, and that of oxypurinol by 2.2-fold from 1 to 2 h after the administration of losartan potassium. Meanwhile, the urinary excretion of uric acid decreased by 43%, and that of oxypurinol by 40%, from 1 to 2 h after the administration of furosemide. Also, the fractional clearance of uric acid decreased by 46% and that of oxypurinol by 39%, from 1 to 2 h after the administration of furosemide. The plasma concentration of total protein increased by 9% at 1.5 h after administration of furosemide. In the control study, these values did not change.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:231552 CAPLUS
DOCUMENT NUMBER: 130:249107
TITLE: System and method for measuring hydrogen peroxide levels in a fluid and method for assessing oxidative stress
INVENTOR(S): Lacy, Fred; Schmid-Schonbein, Geert W.; Gough, David
PATENT ASSIGNEE(S): The Regents of the University of California, USA
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9915891	A1	19990401	WO 1998-US19013		19980914 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
AU 9894805	A1	19990412	AU 1998-94805		19980914 <--
PRIORITY APPLN. INFO.:			US 1997-60010P	P	19970925 <--
			WO 1998-US19013	W	19980914 <--

AB The detection system includes a pair of electrochem. hydrogen peroxide sensors, each sensor having working, counter and reference electrodes. A bias voltage is applied to maintain a voltage difference between the working and reference electrodes. A sample aliquot of fluid was treated with either sodium azide or catalase. The sensors are placed in containers containing sufficient amts. of treated fluid to cover the active portions of the electrodes. The output current of each sensor is amplified, and the resulting amplified signals are combined and subtracted to provide a signal which is representative of the level of hydrogen peroxide in the fluid. In a method for assessing oxidative stress, including that related to essential **hypertension**, the detection system is used to determine a representative level of hydrogen peroxide in blood plasma drawn from a test subject. The level of hydrogen peroxide is directly related to the level of reactive oxygen species in the plasma, and can be used as an accurate predictor of risk for essential **hypertension** or other

conditions related to oxidative stress. Blood plasma samples of normotensive subjects and patients with essential **hypertension** were analyzed by the system. When hypertensives were compared with family history neg. normotensives, it was found that the hypertensive group had a higher mean arterial pressure by 23% as well as higher levels of plasma hydrogen peroxide by 48% over the normotensive control.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 9 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:717166 CAPLUS
DOCUMENT NUMBER: 132:192650
TITLE: Pathogenic role of oxidative stress in vascular angiotensin-converting enzyme activation in long-term blockade of nitric oxide synthesis in rats
AUTHOR(S): Usui, Makoto; Egashira, Kensuke; Kitamoto, Shiro; Koyanagi, Masamichi; Katoh, Makoto; Kataoka, Chu; Shimokawa, Hiroaki; Takeshita, Akira
CORPORATE SOURCE: Research Institute of Angiocardiology and Cardiovascular Clinic, Kyushu University Faculty of Medicine, Fukuoka, 812-8582, Japan
SOURCE: Hypertension (**1999**), 34(4, Pt. 1), 546-551
CODEN: HPRTDN; ISSN: 0194-911X
PUBLISHER: Lippincott Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Inhibition of nitric oxide (NO) synthesis with Nω-nitro-L-arginine Me ester (L-NAME) activates vascular angiotensin-converting enzyme (ACE) and causes oxidative stress. We investigated the role of oxidative stress in the pathogenesis of ACE activation in rats. Studies involved aortas of rats receiving no treatment, L-NAME, L-NAME plus L-arginine, or L-NAME plus an antioxidant drug (N-acetylcysteine, allopurinol, or ebselen) for 7 days. L-NAME significantly increased oxidative stress (O2-) and ACE activity. The increased O2- production was normalized by removal of endothelium. Immunohistochem. showed the increased ACE activity in the endothelial layer. Treatment with antioxidant drugs did not affect the L-NAME-induced increase in systolic arterial pressure but did prevent increases in vascular O2- production and ACE activity. These results implicate oxidative stress in the pathogenesis of vascular ACE activation in rats with long-term inhibition of NO synthesis. The observed effects of antioxidant drugs on ACE activation do not appear to involve the **hypertension** induced by L-NAME.

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:56067 CAPLUS
DOCUMENT NUMBER: 130:218034
TITLE: Exposure to allopurinol and the risk of cataract extraction in elderly patients
AUTHOR(S): Garbe, Edeltraut; Suissa, Samy; LeLorier, Jacques
CORPORATE SOURCE: Potsdam Institute of Pharmacoepidemiology, Technology Assessment, Potsdam, Germany
SOURCE: Archives of Ophthalmology (Chicago) (**1998**), 116(12), 1652-1656
CODEN: AROPAW; ISSN: 0003-9950
PUBLISHER: American Medical Association
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Objective: To determine whether exposure to allopurinol is associated with an increased risk of cataract extraction in elderly patients. Methods: We conducted a case-control study using data from the Quebec universal health insurance program for all elderly patients. The 3677 cases were patients with a cataract extraction between 1992 and 1994. The 21 868 controls were

randomly selected among patients not diagnosed with cataract and matched to cases on the date of the extraction We determined the odds ratio of cataract extraction according to the cumulative dose and duration of allopurinol use relative to nonusers, using conditional logistic regression anal. The anal. was adjusted for the effects of age, sex, diabetes mellitus, **hypertension**, glaucoma, and ophthalmic and oral corticosteroid exposure. Results: A cumulative dose of allopurinol of more than 400 g or a duration of use of longer than 3 yr were associated with an increased risk of cataract extraction, with odds ratios of 1.82 (95% confidence interval [CI], 1.18-2.80) and 1.53 (95% CI, 1.12-2.08), resp. No increase in risk was observed for lower cumulative doses or shorter exposure periods. Conclusion: Long-term administration of allopurinol increases the risk of cataract extraction in elderly patients.

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 11 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:671552 CAPLUS

DOCUMENT NUMBER: 130:34174

TITLE: Role of xanthine oxidase in hydrogen peroxide production

AUTHOR(S): Lacy, Fred; Gough, David A.; Schmid-Schonbein, Geert W.

CORPORATE SOURCE: Department of Bioengineering, Institute for Biomedical Engineering, University of California at San Diego, La Jolla, CA, 92093-0412, USA

SOURCE: Free Radical Biology & Medicine (**1998**), 25(6), 720-727
CODEN: FRBMEH; ISSN: 0891-5849

PUBLISHER: Elsevier Science Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Increased production of oxygen free radicals may play a role in many diseases such as **hypertension**. As evidence indicates that xanthine oxidase may be involved in creating these reactive oxygen species, expts. were performed to addnl. characterize hydrogen peroxide (H2O2) production in xanthine oxidase-catalyzed reactions. In vitro measurements of hydrogen peroxide production from the xanthine/xanthine oxidase reaction were performed in buffered saline using an electrochem. technique, and the effect of allopurinol on inhibition of xanthine oxidase was determined Expts. were also performed in blood plasma to characterize endogenous hydrogen peroxide-producing capability and xanthine oxidase activity. In the presence of sodium azide, an inhibitor of catalase, peroxide production was measured in plasma after adding xanthine or xanthine oxidase and the results were similar to those obtained in buffered saline. When only sodium azide was added to plasma, hydrogen peroxide was produced at a level of 36.1 ± 7.6 μM (n = 5). From these measurements, endogenous xanthine oxidase activity was estimated to be 6.5 ± 0.3 mU/mL (n = 5). These results suggest that sufficient substrate exists in plasma to produce micromolar levels of hydrogen peroxide and xanthine oxidase may catalyze these reactions.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:569276 CAPLUS

DOCUMENT NUMBER: 129:310723

TITLE: Efficacy of allopurinol in ameliorating the progressive renal disease in familial juvenile hyperuricemic nephropathy (FJHN). A six-year update

AUTHOR(S): McBride, M. B.; Simmonds, H. A.; Ogg, C. S.; Cameron, J. S.; Rigden, S.; Rees, L.; Hoff, W. Van't; Moro, F.; Raman, G. V.

CORPORATE SOURCE: Purine Research, Renal and Paediatric Renal Units, UMDS, Guy's Hospital, UK
SOURCE: Advances in Experimental Medicine and Biology (**1998**), 431(Purine and Pyrimidine Metabolism in Man IX, 1998), 7-11
CODEN: AEMBAP; ISSN: 0065-2598
PUBLISHER: Plenum Publishing Corp.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Earlier work by the authors showed beneficial effects of allopurinol in 10 patients with familial juvenile hyperuricemic nephropathy (FJHN) followed for up to 23 yr. However, these findings have been disputed by others who reported no such effect. Results are now presented of the follow-up of many more patients, including siblings recognized as having FJHN during biochem. screening. Results confirmed that allopurinol ameliorated the rapid decline in renal function seen both previously and in this study in 75% of subjects. A creatine level of > 200 μmol/l at diagnosis indicated poor prognosis. Efficacy of allopurinol depends on good compliance, and aggressive control of **hypertension**, if present, was also vital.
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 13 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:51850 CAPLUS
DOCUMENT NUMBER: 128:113673
TITLE: Possibility of gout complications caused by xanthine oxidase and active oxygen
AUTHOR(S): Matsumoto, Mihuji; Sakano, Shougo
CORPORATE SOURCE: Dep. Blood Transfus., Nagoya City Univ., Nagoya, 467, Japan
SOURCE: Purin, Pirimijin Taisha (**1997**), 21(2), 171-173
CODEN: PPTAEV; ISSN: 0916-2836
PUBLISHER: Nippon Purin, Pirimijin Taisha Gakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Oxidation and denaturing of blood lipids as well as atherosclerotic changes were detected in gout patients, and atherosclerosis is a factor selecting uric acid controlling medicine in gout. The patients with **hypertension**, glucose tolerance anomaly and splanchnic adiposis, being atherosclerotic factors, exhibited high lipid peroxide (LPO) concentration in blood before drug treatment. LPO concentration decreased after treatment in patients with decrease in atherosclerotic factors. The concentration was lower in patients receiving allopurinol (AP) than benzbromarone (BB). The pos. ratio of anti-oxidized and denatured low d. lipoprotein (LDL) antibody was higher in BB-treated patients than AP-treated patients in cases with administration period >1 yr. In BB-treated patients, the LPO concentration increased when hyperuricemia was poorly controlled.

L7 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:565344 CAPLUS
DOCUMENT NUMBER: 125:244617
TITLE: Allopurinol reduces bacterial translocation, intestinal mucosal lipid peroxidation, and neutrophil-derived myeloperoxidase activity in chronic portal hypertensive and common bile duct-ligated growing rats
AUTHOR(S): Schimpl, Gunther; Pesendorfer, Patricia; Steinwender, Gerhard; Feierl, Gerhard; Ratschek, Manfred; Hollwarth, Michael E.
CORPORATE SOURCE: Medical School, University Graz, A-8036, Austria
SOURCE: Pediatric Research (**1996**), 40(3), 422-428

CODEN: PEREBL; ISSN: 0031-3998
PUBLISHER: Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Bacterial translocation (BT) from the gastrointestinal tract has been thought to play a role in the pathogenesis of septic complications in patients with chronic portal **hypertension** (PH) and obstructive jaundice. The purpose of this study was to investigate the incidence of BT and to assess the role of intestinal mucosal malondialdehyde (MDA) levels as an indicator of lipid peroxidn. and polymorphonuclear neutrophil-derived myeloperoxidase (MPO) in chronic portal hypertensive and common bile duct-ligated rats. Twenty male rats were subjected to sham laparotomy (SL), 20 rats to calibrated portal vein constriction (PH), 20 rats to common bile duct ligation (CBDL), and 10 rats served as a nonoperated control group (NOP). After 4 wk, 10 animals of each operated group received 50 mg/kg allopurinol i.p., at 24 h, and again 2 h prior to estimation of BT, intestinal mucosal MDA, and MPO activities. In the NOP and SL groups, BT to the mesenteric lymph nodes (MLN) and spleen was present. In PH and in CBDL rats, BT to liver, portal vein, peritoneum, and caval vein occurred. Allopurinol treatment attenuated the frequence of BT in PH and decreased BT in CBDL rats significantly ($p < 0.05$). Ileal mucosal MDA levels (nanomoles/g) in untreated rats increased from 45,1 ± 7.9 in SL to 98.2 ± 9.1 in PH and to 102.2 ± 11 in CBDL rats ($p < 0.01$). In the allopurinol groups the increase of MDA to 49.1 ± 1.3 in PH, and 66.2 ± 2.2 in CBDL was significantly lower ($p < 0.01$). MPO activity (units/g) in the ileal mucosa increased in untreated rats from 319 ± 129 after SL to 866 ± 104 after PH and to 1016 ± 104 after CBDL ($p < 0.01$). Allopurinol significantly attenuated MPO activity to 369 ± 44 in PH, and to 372 ± 60 in CBDL animals ($p < 0.01$). In PH and CBDL rats significant BT, intestinal mucosal lipid peroxidn., and polymorphonuclear neutrophil-derived MPO activity occurred. Allopurinol reduced BT and improved intestinal mucosal MDA and MPO activities, suggesting that there might be an association between BT and intestinal mucosal lipid peroxidn.

L7 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:207673 CAPLUS
DOCUMENT NUMBER: 124:313438
TITLE: Potentiation of nitric oxide-mediated vasorelaxation by xanthine oxidase inhibitors
AUTHOR(S): Miyamoto, Yoichi; Akaike, Takaaki; Yoshida, Masaki; Goto, Shingo; Horie, Hidechika; Maeda, Hiroshi
CORPORATE SOURCE: School Medicine, Kumamoto Univ., Kumamoto, 860, Japan
SOURCE: Proceedings of the Society for Experimental Biology and Medicine (**1996**), 211(4), 366-73
CODEN: PSEBAA; ISSN: 0037-9727
PUBLISHER: Blackwell
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Nitric oxide (NO), now almost synonymous with endothelium-derived relaxing factor (EDRF), reacts with superoxide anion radical (O2-) and forms a potentially toxic mol. species, peroxynitrite (ONOO-). Because xanthine oxidase (XO) seems to be a major O2--producing enzyme in the vascular system, it is important to clarify the mechanism of XO regulation of NO/EDRF. We first characterized the inhibition of XO in vitro by three types of pyrazolopyrimidine derivs. Kinetic studies indicated that 4-amino-6-hydroxypyrazolo[3,4-d]pyrimidine (AHPP) and allopurinol competitively inhibited the conversion of xanthine to uric acid catalyzed by XO, with apparent Ki values of 0.17 ± 0.02 and 0.50 ± 0.03 μM, resp.; alloxanthine inhibited this conversion in a noncompetitive manner with an apparent Ki value of 3.54 ± 1.12 μM. O2- generation in the xanthine/XO system assayed by lucigenin-dependent chemiluminescence was suppressed most strongly by AHPP in a dose-dependent fashion; allopurinol itself appears to reduce the enzyme by transfer of an electron to O2, thus generating O2-. AHPP significantly augmented EDRF-mediated relaxation of

aortic rings from both rabbits and spontaneously hypertensive rats (SHR) in a dose-dependent manner, whereas allopurinol did not affect the relaxation and only marginal potentiation of the vasorelaxation was observed with alloxanthine. Finally, i.v. injection of AHPP (50.4 mg/kg; 100 μmol/300 g rat) reduced the blood pressure of SHR rats to 70% of the initial pressure; this pressure is almost the blood pressure of normal rats. Allopurinol (100 μmol/300 g rat; i.v.) showed transient decrease in blood pressure and moderate reduction of **hypertension** of SHR (10%) was observed with i.v. injection of alloxanthine (100 μmol/300 g rat). On the basis of these results, it seems that XO regulates EDRF/NO via production of O2-.

L7 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:493848 CAPLUS
DOCUMENT NUMBER: 125:184971
TITLE: Allopurinol and glutamine attenuate bacterial translocation in chronic portal hypertensive and common bile duct-ligated growing rats
AUTHOR(S): Schimpl, G.; Pesendorfer, P.; Steinwender, G.; Feierl, G.; Ratschek, M.; Hollwarth, M. E.
CORPORATE SOURCE: Medical School, University Graz, Graz, A-8036, Austria
SOURCE: Gut (**1996**), 39(1), 48-53
CODEN: GUTTAK; ISSN: 0017-5749
PUBLISHER: BMJ Publishing Group
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Spontaneous bacterial infections and septicemia result in morbidity and mortality in patients with portal **hypertension** and obstructive jaundice. The aim of this study in rats was to investigate the incidence of bacterial translocation in portal **hypertension** and obstructive jaundice, and to evaluate the effects of allopurinol and glutamine. Rats were subjected to sham laparotomy (SL), portal **hypertension** (PH) by calibrated stenosis of the portal vein, and common bile duct ligation (CBDL). Animals of each group were either treated with allopurinol (50 mg/kg twice a week), glutamine (1 g/kg/d), and allopurinol and glutamine. After four weeks, significant bacterial translocation in the untreated PH and CBDL rats occurred. Intestinal mucosal malondialdehyde concns. (MDA), as an indicator for lipid peroxidn., and myeloperoxidase activity (MPO) released from activated neutrophils were also significantly increased ($p<0.01$). Allopurinol and glutamine in PH and CBDL rats improved bacterial translocation, and decreased MDA and MPO values ($p<0\Sigma01$). In conclusion, in PH and CBDL rats significant bacterial translocation, ileal mucosal lipid peroxidn., and neutrophil derived MPO activity occurred. Allopurinol and glutamine significantly reduced bacterial translocation, as well as ileal mucosal MDA and MPO activities.

L7 ANSWER 17 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:664198 CAPLUS
DOCUMENT NUMBER: 123:166783
TITLE: Analysis of 135 cases of primary gouty arthritis
AUTHOR(S): Yi, Wei; Liang, Xueping; Fan, Jiyuan; Zhang, Peng; Jia, Zhiheng
CORPORATE SOURCE: Dep. Endorcinology, Tianjing Med. Univ., Tianjing, 300052, Peop. Rep. China
SOURCE: Tianjin Yiyao (**1995**), 23(1), 3-6
CODEN: TIYADG; ISSN: 0253-9896
PUBLISHER: Tianjin Yixue Zazhishe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB 135 Of primary gouty arthritis (134 males and 1 female) were complicated with obesity (51.7%), **hypertension** (43.7%) ischemia heart disease (25.2%), hyperlipemia (37.8%), nephrolithiasis (23.7%), s.c. trophic (18.5%), 15% of them had family history, onset age of gout

arthritis ranged from 21 to 74 yr (median 52 yr). After allopurinol therapy serum uric acid decreased from 530.7 ± 99.9 μmol/L (n = 135) to 240.9 ± 66.6 μmol/L (n = 122), p <0.001, fractional clearance (CUA/Ccr) recovered from 7.7 ± 4.7% (n = 96) to 19.4 ± 12.6% (n = 81), p <0.001. 87.6% Patients arthritis were relieved, the results suggested that the deficiency of renal uric acid clearance was involved in the pathogenesis of primary gout.

L7 ANSWER 18 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:309509 CAPLUS
DOCUMENT NUMBER: 122:71419
TITLE: Allopurinol fails to protect against gentamicin-induced renal damage in normotensive and spontaneously hypertensive rats
AUTHOR(S): Smyth, B.J.; Davis, W.G.
CORPORATE SOURCE: Department of Pathology and Laboratory Medicine, Medical University of South Carolina, Charleston, SC, 29425-2645, USA
SOURCE: Nephron (**1994**), 68(4), 468-72
CODEN: NPRNAY; ISSN: 0028-2766
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Recent research suggests the involvement of hydroxyl and superoxide free radicals in the development of gentamicin-induced acute renal tubular necrosis. Xanthine oxidase has been implicated as an important source of superoxide free radicals. Spontaneously hypertensive (Wistar-Kyoto) rats (SHR) have excessive oxidant stress which may render them more sensitive to the reported oxygen free radical producing effects of gentamicin. This study was undertaken to determine if the xanthine oxidase inhibitor allopurinol will ameliorate the effects of gentamicin. Normotensive Wistar-Kyoto (WKY) rats and SHR were administered allopurinol (40 mg/kg twice daily) orally 4 days before and throughout a 12-day gentamicin treatment period. The allopurinol only treatment group demonstrated no noticeable histol. or functional changes considered to be indicative of nephrotoxicity. Gentamicin-injected WKY rats and SHR equally demonstrated extensive proximal tubular and glomerular damage characteristic of aminoglycoside-induced kidney damage. Allopurinol failed to protect either rat strain against the histol. damage caused by gentamicin. Equivalent alterations in serum creatinine, serum gentamicin, urinary N-acetyl-β-D-glucos-aminidase excretion, body weight, urinary output, and blood pressure occurred in the gentamicin with allopurinol and gentamicin only treatment groups. Our results demonstrate allopurinol does not ameliorate the pathogenesis of gentamicin-induced renal damage. SHR do not appear to be more sensitive to the effects of gentamicin-induced kidney damage with or without allopurinol as compared with WKY rats.

L7 ANSWER 19 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:420255 CAPLUS
DOCUMENT NUMBER: 119:20255
TITLE: Protective effects of therapy with a protease and xanthine oxidase inhibitor in short form pancreatic biliary obstruction and ischemia in rats
AUTHOR(S): Hirano, Tetsuya; Manabe, Tadao; Steer, Michael; Printz, Hartmut; Calne, Roy; Tobe, Takayoshi
CORPORATE SOURCE: Dep. Surg., Addenbrookes Hosp., Cambridge, UK
SOURCE: Surgery, Gynecology and Obstetrics (**1993**), 176(4), 371-81
CODEN: SGOBA9; ISSN: 0039-6087
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The current study was done to evaluate the effects of short term (60 min) pancreatic biliary duct obstruction (PBDO) with intraductal **hypertension** (IDH) stimulated by secretin (0.2 clin. unit per kg

per h) and caerulein (0.2 μg per kg per h) plus 30 min of temporary pancreatic ischemia (ISCH) produced by ligation of celiac and superior mesenteric artery on the exocrine pancreas and protective effects of a new potent protease inhibitor, ONO3307 in combination with xanthine oxidase inhibitor, allopurinol, in this multifactor related model of acute pancreatitis in rats. 12 H after PBDO with IDH plus ISCH, we observed hyperamylasemia; pancreatic edema into the pancreatic juice of rats stimulated by caerulein (control group-serum amylase levels, 6 ± 1 units per mL; pancreatic water content, 74 ± 1 percent. Furthermore, PBDO with IDH plus ISCH caused the redistribution of lysosomal enzyme from lysosomal fraction to zymogen fraction. Only PBDO with IDH caused no significant changes. Although only ONO3307 or allopurinol therapy showed the partial significant protective effects against pancreatic injuries, improving serum amylase levels, the administration of ONO3307 in combination therapy with allopurinol showed almost complete protective effects against the pancreatic injuries induced by PBDO with IDH plus ISCH (serum amylase levels, 9 ± 2 units per mL; pancreatic water content, 76 ± 2 percent; amylase and cathepsin B output, 7,127 ± 946 and 18 ± 3 units per kg per h; 1.3 kilo times gravity pellet, 28 ± 2 percent; 12 kilo times gravity pellet, 54 ± 2 percent, and energy charge equals 0.85 ± 0.02). These results indicate the important roles of temporary pancreatic ischemia and oxygen derived free radicals in the pathogenesis of pancreatic damages in this PBDO with IDH plus ISCH reperfusion in the rat model and the usefulness of combination therapy of such a new potent protease inhibitor and xanthine oxidase inhibitor, such as allopurinol, in the treatment of clin. acute pancreatitis.

L7 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1991:199354 CAPLUS
DOCUMENT NUMBER: 114:199354
TITLE: Nephrotoxicity of allopurinol is enhanced in experimental **hypertension**
AUTHOR(S): Trachtman, Howard; Valderrama, Elsa; Futterweit, Stephen
CORPORATE SOURCE: Dep. Pediatr., Schneider Child. Hosp., New Hyde Park, NY, 11042, USA
SOURCE: Hypertension (**1991**), 17(2), 194-202
CODEN: HPRTDN; ISSN: 0194-911X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Hyperuricemia is present in 20-40% of pediatric and adult patients with essential **hypertension**. This metabolic abnormality may represent an addnl. risk factor for the development of cardiovascular disease. Therefore, the authors performed the following studies to determine 1) whether hyperuricemia is more prevalent in the spontaneously hypertensive rat (SHR) and 2) whether allopurinol treatment has a beneficial effect on the development of **hypertension** in this strain, based on its capacity to lower the serum uric acid concentration and to act as an antioxidant agent. SHR and control Wistar-Kyoto (WKY) rats were assigned to two groups, one given tap water to drink and the other provided water containing allopurinol (400 mg/L) to furnish an approx. daily dose equal to 100 mg/kg. This treatment was maintained for 15 wk. The serum uric acid levels were similar in untreated SHR and WKY rats (1.85 vs. 1.66 mg/dL). In the control WKY rat strain, allopurinol therapy did not adversely affect weight gain or hematocrit and did not cause an increase in mortality. It resulted in a moderate decrement in kidney function (creatinine clearance: allopurinol-treated group 0.32 vs. control group 0.46 mL/min/100 g body wt, in conjunction with mild-to-moderate tubulointerstitial inflammation (allopurinol-treated group 0.9 vs. control group 0). In contrast, administration of allopurinol to SHR resulted in failure to thrive, marked anemia, severe azotemia (creatinine clearance: allopurinol-treated group 0.04 vs. control group 0.39 mL/min/100 g body weight; $p<0.001$), and severe tubular atrophy and interstitial fibrosis (allopurinol-treated group 2.2 vs. control group 0). These findings

indicate that hyperuricemia is not more prevalent in the SHR. Furthermore, allopurinol administration is associated with markedly increased nephrotoxicity characterized by severe tubulointerstitial injury, azotemia, and impaired growth.

L7 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1989:69302 CAPLUS
DOCUMENT NUMBER: 110:69302
TITLE: The malonyldialdehyde levels in the cerebral tissue after reperfusion following the occlusion of the bilateral common carotid artery in spontaneously hypertensive rats and the effect of allopurinol, a xanthine oxidase inhibitor
AUTHOR(S): Kawakami, Masato; Itoh, Toru; Tochigi, Shoichiro
CORPORATE SOURCE: Sch. Med., St. Marianna Univ., Japan
SOURCE: Nosotchu (**1988**), 10(5), 400-3
CODEN: NOSOD4; ISSN: 0912-0726
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Using spontaneously hypertensive rats, the authors studied the effect of allopurinol, a xanthine oxidase inhibitor, on lipid peroxidn. in the cerebral tissue after reperfusion for 30 min following the occlusion of the bilateral common carotid artery for 3 h. In the present study, the malonyldialdehyde (MDA) values were measured as indicators for lipid peroxides in the cerebral tissue, and compared them between the group pretreated with oral administrations of allopurinol (400 mg/kg) and the nontreated control group. As a result, the MDA value measured were found to be 68.9 nmol/gm in the Sham-operated group and 83.27 nmol/gm in the control group. However, the allopurinol-treated group showed a level as low as 67.62 nmol/gm which was significant compared to that of the control group. These results suggest the possibility that allopurinol inhibits the lipid peroxidn. caused by the xanthine oxidase-linked free radical induced by cerebral ischemia and reperfusion.

L7 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1969:429245 CAPLUS
DOCUMENT NUMBER: 71:29245
TITLE: Hyperlipemia following allopurinol administration
AUTHOR(S): Thibodeau, G. A.; Felker, J. R.; Swanson, R. N.
CORPORATE SOURCE: South Dakota State Univ., Brookings, SD, USA
SOURCE: South Dakota Journal of Medicine (**1969**), 22(4), 40-2
CODEN: SDMEAL; ISSN: 0038-3317
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Allopurinol (I) in a single clin. case and in a preliminary animal study caused hyperlipemia. A male patient diagnosed as having primary gout and benign essential **hypertension** was placed on allopurinol therapy (100 mg. 4 times/day together with colchicine at 0.65 mg./day). Marked increase in serum lactescence was noted after initiation of therapy. Blood anal. made 2 months after initiation of therapy showed total lipids 4287, phospholipids 876, and triglycerides 2245 mg. %. Allopurinol therapy was discontinued. Blood anal. made 2 weeks later showed total lipids 2640 phospholipids 396, and triglycerides 1100 mg. %. Rabbits were given I (50 mg./day) for 2 weeks. Blood samples obtained by cardiac puncture were then tested for pre- and posttreatment total serum cholesterol levels. A 17.5% increase in total serum cholesterol was found.

L7 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1967:452640 CAPLUS
DOCUMENT NUMBER: 67:52640
TITLE: Allopurinol in thiazide-induced hyperuricemia
AUTHOR(S): Rapado Errazti, Aurelio

CORPORATE SOURCE: Fundacion Jimenez-Diaz, Madrid, Spain
SOURCE: Annals of the Rheumatic Diseases, Supplement (**1966**), 6, 660-7
CODEN: ARHSB7
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Allopurinol (I) given to normal subjects decreased serum and urinary uric acid (II) levels. There was no significant change in urate clearance (Curate) or in the ratio of urate-to-creatinine clearance (Ccreatinine). I and thiazide diuretics given together caused serum II to increase and Curate to decrease with no effect on urinary II. The effect of I alone on hypertensive patients with normal kidney function was the same as for controls. The diuretic increased serum II, and decreased Curate and the Curate-to-Ccreatinine ratio. Diuretics given during I treatment had no effect on serum or urinary II. Thiazide decreased the glomerular filtration rate (GFR) and the ratio of Curate-to-Ccreatinine. Gouty hypertensive patients with normal renal function previously treated with I did not have significantly increased serum II nor decreased Curate levels after thiazide administration. The GFR decreased in gouty hypertensive patients with impaired renal function. There was no hyperuricemic response nor variation in Curate. The ratio of Curate-to-Ccreatinine increased. After I administration, serum and urinary II returned to normal in hypertensives with thiazideinduced hyperuricemia. Gouty hypertensives previously treated with thiazides had normal serum II and decreased urinary II after I administration. These patients previously treated with I had no significant differences in serum or urinary II after diuretic administration. I had no effect on the hypotensive action from diuretic administration. In some gouty patients where serum II was restored to normal by I, thiazide precipitated an acute attack mainly at the beginning of treatment. The serum II level was appreciably less than before treatment. Increased doses of colchicine controlled the attack. There were no alterations in blood pressure or hepatic function during I administration.